SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

SCHEDULE 13D (Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(a)

(Amendment No. 9)¹

MKS INSTRUMENTS, INC.

(Name of Issuer)

Common Stock, no par value

(Title of Class of Securities)

55306N104

(CUSIP Number)

Timothy G. Westman Assistant Secretary Emerson Electric Co. 8000 W. Florissant Avenue St. Louis, MO 63136 (314) 553-2431

(Name, Address and Telephone Number of Person

Authorized to Receive Notices and Communications)

July 27, 2006

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box o.

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. *See* Rule 13d-7 for other parties to whom copies are to be sent.

(Continued on following pages)

¹ The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, *see* the *Notes*).

CUSIP No.	55306N104

1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)			
	Emerson Electric Co.			
2				(a)o (b) x
3	SEC USE ONLY			
4	SOURCE OF FUNDS*			
	00, WC			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION			
	State of Missouri			
		7	SOLE VOTING POWER	
			1,065,182	
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		SHARED VOTING POWER	
			13,597,288	
			SOLE DISPOSITIVE POWER	
			1,065,182	
		10	SHARED DISPOSITIVE POWER	
			5,838,924	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	14,662,470 - See Items 4 and 5			
12				
	0			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)			
	26.1% - See Items 4 and 5			
14	TYPE OF REPORTING PERSON*			
	со			

*SEE INSTRUCTIONS BEFORE FILLING OUT!

CUSIP No. 55306N104

SCHEDULE 13D

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1	NAME OF REPORTING PERSONS I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)			
	Astec America, Inc.			
2				(a) o (b) o
3	SEC USE ONLY			
4	SOURCE OF FUNDS*			
	00			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)			
6	CITIZENSHIP OR PLACE OF ORGANIZATION			
	Delaware			
		7	SOLE VOTING POWER	
			-0-	
			SHARED VOTING POWER	
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		5,838,924	
		9	SOLE DISPOSITIVE POWER	
			-0-	
		10	SHARED DISPOSITIVE POWER	
			5,838,924	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	5,838,924 - See Item 5			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)			
	10.4% - See Item 5			
14	TYPE OF REPORTING PERSON*			
	СО			

*SEE INSTRUCTIONS BEFORE FILLING OUT!

Unless indicated otherwise, all items left blank remain unchanged and any items which are reported are deemed to replace or add to the existing items in the original Schedule 13D (as amended). All defined terms shall have the same meaning as previously ascribed to them in the original Schedule 13D (as amended), unless otherwise noted.

Item 1. Security and Issuer.

Item 2. Identity and Background.

Item 3. Source and Amount of Funds or Other Consideration.

Item 4. Purpose of Transaction.

The following additional paragraph is added before the last paragraph of item 4 of this Schedule 13D, as amended through Amendment No. 8:

Emerson sold shares of Common Stock in the amounts and on the dates listed in Schedule C hereto. In each case such shares were held indirectly by Emerson through its wholly-owned subsidiary, Astec.

Item 5. Interest in Securities of the Issuer.

(a) For the purposes of Rule 13d-3 promulgated under the Exchange Act, Emerson may be deemed to beneficially own 14,662,470 shares of Common Stock, or approximately 26.1% of the outstanding shares of Common Stock.

For the purposes of Rule 13d-3 promulgated under the Exchange Act, Astec may be deemed to beneficially own 5,838,924 shares of Common Stock, or approximately 10.4% of the outstanding shares of Common Stock.

Emerson disclaims the existence of a group (pursuant to the Shareholder Agreement, Voting Agreement or otherwise) and the Reporting Persons are filing this Statement jointly pursuant to Rule 13d-1(k)(1) promulgated under the Exchange Act.

Except as set forth in this Item 5(a), none of the Reporting Persons, and, to the best of the knowledge of each Reporting Person, any persons named in Schedule A or Schedule B hereto, owns beneficially any Shares.

(b) By virtue of the relationship set forth under Item 2 of this Statement, Emerson may be deemed to have the sole power to vote or direct the vote and sole power to dispose or direct the disposition of 1,065,182 shares of Common Stock held by it directly and the shared power to direct the disposition of and vote of the 5,838,924 shares of Common Stock held by Astec.

By virtue of the Voting Agreement, the details of which are set forth under Item 4 of this Statement, Emerson may be deemed to have the shared power to vote or direct the vote of the 7,758,364 shares of Common Stock held by the Stockholders holding such shares as of July 26, 2006 for the limited purposes described in Item 4 of this Statement.

Astec has the shared power to vote or direct the vote and the shared power to dispose or direct the disposition of the 5,838,924 shares of Common Stock held by it.

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(c) The Reporting Persons and/or the persons set forth in Schedule A or Schedule B hereto have effected transactions in the shares of Common Stock during the past 60 days as set forth in Schedule C hereto.

(d) Emerson and Astec each shall be entitled to receive dividends declared on their respective shares of Common Stock and proceeds from the sale of the shares of Common Stock.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Item 7. Material to be Filed as Exhibits.

Exhibit 1:	Joint Filing Agreement
Exhibit 2:	Agreement and Plan of Merger with respect to the Acquisition of the ENI Business dated as of October 30, 2001 between Emerson Electric Co. and MKS Instruments, Inc. ²
Exhibit 3:	Shareholder Agreement dated as of January 31, 2002 among MKS Instruments, Inc. and Emerson Electric Co. ³
Exhibit 4:	Voting Agreement dated as of October 30, 2001 between Emerson Electric Co. and John R. Bertucci, Claire R. Bertucci and certain other parties set forth in Schedule 1 to such Voting Agreement. ⁴
Exhibit 5:	Joinder Agreement to the Voting Agreement dated as of December 14, 2001 by Robinson Hill L.P. ⁵

 2 Filed as an exhibit to the Schedule 13D dated January 31, 2002.

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 $^{^{3}}$ Filed as an exhibit to the Schedule 13D dated January 31, 2002.

⁴ Filed as an exhibit to the Schedule 13D dated January 31, 2002.

 $^{^{5}}$ Filed as an exhibit to the Schedule 13D dated January 31, 2002.

SIGNATURES

After reasonable inquiry and to the best knowledge and belief of the undersigned, the undersigned certifies that the information set forth in this statement is true, complete and correct.

Date: July 31, 2006

EMERSON ELECTRIC CO.

By: /s/ Timothy G. Westman

Name: Timothy G. Westman Title: Assistant Secretary

ASTEC AMERICA, INC.

By: /s/ Timothy G. Westman

Name: Timothy G. Westman Title: Secretary

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Executive Officers and Directors of Emerson Electric Co. ("Emerson")

The names of the Directors and the names and titles of the Executive Officers of Emerson Electric Co. are set forth below. If no business address is given, the director's or officer's business address is 8000 W. Florissant Avenue, St. Louis, MO 63136. Unless otherwise indicated below, all of the persons listed below are citizens of the United States of America.

Directors			
Name and Business Address	Present Principal Occupation Including Name of Employer		
A.A. Busch III Anheuser-Busch Companies, Inc. One Busch Place St. Louis, MO 63118	Chairman of the Board of Anheuser-Busch Companies, Inc.		
D.N. Farr	Chairman of the Board, Chief Executive Officer and President of Emerson		
D.C. Farrell	Retired		
C. Fernandez G. Grupo Modelo, S.A. de C.V. Campos Eliseos No. 400, Piso 18 Lomas de Chapultepec 11000 Mexico, D.F. Citizenship: Mexico	Chairman and Chief Executive Officer of Grupo Modelo, S.A. de C.V.		
W.J. Galvin	Senior Executive Vice President and Chief Financial Officer of Emerson		
A.F. Golden Davis Polk & Wardwell 450 Lexington Avenue New York, NY 10017	Partner of Davis Polk & Wardwell		
R.B. Horton Stoke Abbas South Stoke Oxfordshire RG8 OJT Citizenship: United Kingdom	Executive Chairman of the Sporting Exchange, Ltd.		
G.A. Lodge	Retired		
V.R. Loucks, Jr. 1101 Skokie Blvd. Suite 240 North Brook, IL 60062	Retired		
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Name and Business Address	Present Principal Occupation Including Name of Employer
J.B. Menzer Wal-Mart International 702 S.W. 8th Street Mail Station 0130 Bentonville, AK 72716	Vice Chairman of Wal-Mart Stores, Inc.
C.A. Peters	Senior Executive Vice President of Emerson
J.W. Prueher	Retired
R.L. Ridgway	Retired
Randall L. Stephenson AT&T Inc. 175 E. Houston Street, Suite 1307 San Antonio, TX 78205	Chief Operating Officer of AT&T Inc.
	Executive Officers (who are not also Directors)
W.W. Withers	Executive Vice President, Secretary and General Counsel of Emerson
E.L. Monser	Chief Operating Officer of Emerson
R.J. Schlueter	Vice President and Chief Accounting Officer of Emerson
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Executive Officers and Directors of Astec America, Inc.

The names of the Directors and the names and titles of the Executive Officers of Astec America are set forth below. If no business address is given, the director's or officer's business address is 5810 Van Allen Way, Carlsbad, California 92008. Unless otherwise indicated below, all of the persons listed below are citizens of the United States of America.

Directors		
Name and Business Address	Present Principal Occupation Including Name of Employer	
J.L. Geldmacher	President of Astec America	
W. Hartleb	Director Receivables Management, Astec America	
T.C. Rosenast	Treasurer of Astec America	

Executive Officers (who are not also Directors)

Not applicable

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SCHEDULE C

		Shares of Common		
Date	Reporting Person	Stock	Price/Share	Transaction
6/26/2006	Emerson Electric Co. (1)	25,000	\$19.6537(2)	open market sale
6/27/2006	Emerson Electric Co. (1)	25,000	\$19.6829(3)	open market sale
6/28/2006	Emerson Electric Co. (1)	25,000	\$19.3720(4)	open market sale
6/29/2006	Emerson Electric Co. (1)	25,000	\$20.0346(5)	open market sale
6/30/2006	Emerson Electric Co. (1)	25,000	\$20.2981(6)	open market sale
7/3/2006	Emerson Electric Co. (1)	25,000	\$20.3126(7)	open market sale
7/5/2006	Emerson Electric Co. (1)	25,000	\$19.6942(8)	open market sale
7/6/2006	Emerson Electric Co. (1)	25,000	\$19.7316(9)	open market sale
7/7/2006	Emerson Electric Co. (1)	25,000	\$19.5044(10)	open market sale
7/10/2006	Emerson Electric Co. (1)	17,400	\$19.2217(11)	open market sale
7/11/2006	Emerson Electric Co. (1)	25,000	\$19.0371(12)	open market sale
7/12/2006	Emerson Electric Co. (1)	25,000	\$19.3362(13)	open market sale
7/13/2006	Emerson Electric Co. (1)	17,031	\$19.1121(14)	open market sale
7/19/2006	Emerson Electric Co. (1)	25,000	\$19.0907(15)	open market sale
7/20/2006	Emerson Electric Co. (1)	3,900	\$19.1656(16)	open market sale
7/25/2006	Emerson Electric Co. (1)	5,600	\$19.0246(17)	open market sale
7/27/2006	Emerson Electric Co. (1)	25,000	\$21.8127(18)	open market sale
7/28/2006	Emerson Electric Co. (1)	25,000	\$21.2385(19)	open market sale

(1) By Astec

(2) The sales were effected in multiple transactions, at varying prices, on June 26, 2006, as follows: 483 shares at \$19.37; 700 at \$19.38; 400 at \$19.40; 617 at \$19.41; 200 at \$19.42; 400 at \$19.43; 400 at \$19.44; 600 at \$19.45; 300 at \$19.46; 100 at \$19.47; 300 at \$19.48; 524 at \$19.50; 200 at \$19.51; 400 at \$19.52; 200 at \$19.53; 300 at \$19.54; 600 at \$19.55; 400 at \$19.56; 583 at \$19.57; 900 at \$19.60; 400 at \$19.62; 400 at \$19.63; 600 at \$19.63; 600 at \$19.66; 1,280 at \$19.69; 744 shares at \$19.70; 669 at \$19.71; 200 at \$19.72; 330 at \$19.73; 200 at \$19.74; 2,700 at \$19.75; 1,300 at \$19.77; 200 at \$19.77; 200 at \$19.80; 800 at \$19.82; 700 at \$19.83; 200 at \$19.84; 200 at \$19.75; 1,000 at \$19.77; 200 at \$19.75; 1,000 at \$19.77; 200 at \$19.75; 1,000 at \$19.75; 1,000 at \$19.77; 200 at \$19.75; 1,000 at \$19.

- (3) The sales were effected in multiple transactions, at varying prices, on June 27, 2006, as follows: 100 shares at \$19.48; 700 at \$19.49; 500 at \$19.50; 100 at \$19.51; 500 at \$19.52; 500 at \$19.75; 500 at \$19.76; 500 at \$19.76
- (4) The sales were effected in multiple transactions, at varying prices, on June 28, 2006, as follows: 300 shares at \$19.14; 300 at \$19.15; 200 at \$19.16; 200 at \$19.17; 500 at \$19.18; 100 at \$19.19; 500 at \$19.20; 300 at \$19.22; 200 at \$19.23; 600 at \$19.24; 300 at \$19.25; 500 at \$19.26; 1,300 at \$19.27; 500 at \$19.28; 300 at \$19.29; 500 at \$19.30; 200 at \$19.31; 1,000 at \$19.32; 1,425 at \$19.33; 1,000 at \$19.34; 200 at \$19.35; 1,400 at \$19.37; 800 at \$19.36; 500 at \$19.39; 300 at \$19.40; 1,100 shares at \$19.41; 1,159 at \$19.42; 1,100 at \$19.43; 1,400 at \$19.44; 400 at \$19.45; 100 at \$19.47; 400 at \$19.48; 100 at \$19.49; 300 at \$19.39; 300 at \$19.40; 1,100 shares at \$19.41; 1,159 at \$19.42; 1,100 at \$19.43; 1,400 at \$19.57; 500 at \$19.45; 100 at \$19.55; 500 at \$19.56; 100 at \$19.57; 200 at \$19.59; and 200 at \$19.63. The weighted average sales price for these transactions was \$19.372 per share.
- (5) The sales were effected in multiple transactions, at varying prices, on June 29, 2006, as follows: 200 shares at \$19.69; 200 at \$19.71; 200 at \$19.72; 400 at \$19.73; 500 at \$19.74; 208 at \$19.75; 200 at \$19.76; 200 at \$19.76; 200 at \$19.78; 700 at \$19.79; 100 at \$19.80; 200 at \$19.81; 1,000 at \$19.82; 200 at \$19.83; 496 at \$19.84; 600 at \$19.85; 665 at \$19.86; 1,139 at \$19.87; 700 at \$19.88; 800 at \$19.89; 900 at \$19.90; 300 at \$19.91; 1,400 at \$19.92; 600 at \$19.94; 1,200 at \$19.94; 1,200 at \$19.95; 500 at \$19.96; 200 at \$19.97; 500 at \$19.98; and 1,019 at \$19.99; 200 shares at \$20.01; 100 at \$20.03; 100 at \$20.01; 300 at \$20.12; 100 at \$20.13; 48 at \$20.16; 200 at \$20.22; 181 at \$20.29; 19 at \$20.30; 900 at \$20.31; 200 at \$20.32; 100 at \$20.33; 100 at \$20.43; 100 at \$20.34; 100 at \$20.35; 100 at \$20.36; 400 at \$20.36; 100 at

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\$20.41; 293 at \$20.42; 200 at \$20.44; 200 at \$20.46; 200 at \$20.48; 500 at \$20.49; 1,100 at \$20.50; 625 at \$20.51; and 400 at \$20.52. The weighted average sales price for these transactions was \$20.0346 per share.

- (6) The sales were effected in multiple transactions, at varying prices, on June 30, 2006, as follows: 386 shares at \$19.99; 300 at \$20.00; 14 at \$20.02; 400 at \$20.03; 200 at \$20.04; 200 at \$20.05; 300 at \$20.06; 300 at \$20.08; 118 at \$20.09; 200 at \$20.14; 200 at \$20.15; 400 at \$20.16; 477 at \$20.17; 700 at \$20.18; 500 at \$20.19; 1,200 at \$20.20; 500 at \$20.22; 400 at \$20.22; 400 at \$20.22; 300 at \$20.22; 400 at \$20.25; 600 at \$20.25; 600 at \$20.26; 700 at \$20.28; 27 at \$20.29; 139 shares at \$20.30; 600 at \$20.31; 300 at \$20.32; 800 at \$20.33; 300 at \$20.34; 688 at \$20.35; 200 at \$20.36; 400 at \$20.38; 1,101 at \$20.39; 1,000 at \$20.29; 1,100 at \$20.40; 1,399 at \$20.41; 1,447 at \$20.42; 1,350 at \$20.43; 823 at \$20.44; 1,169 at \$20.45; 662 at \$20.46; 200 at \$20.47; and 100 at \$20.48. The weighted average sales price for these transactions was \$20.281 per share.
- (7) The sales were effected in multiple transactions, at varying prices, on July 3, 2006, as follows: 100 shares at \$19.88; 100 at \$19.91; 520 at \$19.92; 100 at \$19.93; 380 at \$19.94; 200 at \$19.95; 180 at \$19.97; 24 at \$20.00; 120 at \$20.01; 176 at \$20.03; 200 at \$20.05; 100 at \$20.07; 1,000 at \$20.09; 600 at \$20.11; 400 at \$20.12; 200 at \$20.13; 100 at \$20.15; 200 at \$20.16; 400 at \$20.16; 200 at \$20.22; 100 at \$20.22; 100 at \$20.22; 100 at \$20.25; 158 at \$20.26; 542 at \$20.27; 307 at \$20.28; 76 at \$20.29; 300 shares at \$20.30; 100 at \$20.31; 200 at \$20.34; 800 at \$20.35; 400 at \$20.36; 500 at \$20.37; 1,500 at \$20.39; 5845 at \$20.40; 2,991 at \$20.42; 742 at \$20.42; 742 at \$20.43; 600 at \$20.44; 317 at \$20.45; 200 at \$20.46; and 400 at \$20.47. The weighted average sales price for these transactions was \$20.3126 per share.
- (8) The sales were effected in multiple transactions, at varying prices, on July 5, 2006, as follows: 100 shares at \$19.44; 100 at \$19.47; 550 at \$19.49; 250 at \$19.50; 1,260 at \$19.51; 200 at \$19.52; 590 at \$19.53; 300 at \$19.54; 224 at \$19.55; 100 at \$19.56; 200 at \$19.57; 400 at \$19.58; 500 at \$19.60; 595 at \$19.61; 100 at \$19.62; 800 at \$19.63; 1,000 at \$19.64; 1,600 at \$19.65; 700 at \$19.69; 400 at \$19.67; 900 at \$19.69; 300 at \$19.69; 300 at \$19.70; 1,600 shares at \$19.71; 400 at \$19.72; 1,660 at \$19.73; 598 at \$19.74; 200 at \$19.75; 300 at \$19.76; 500 at \$19.77; 800 at \$19.77; 800 at \$19.79; 800 at \$19.79; 800 at \$19.80; 500 at \$19.82; 3,700 at \$19.82; 3,000 at \$19.83; and 300 at \$19.84. The weighted average sales price for these transactions was \$19.6942 per share.
- (9) The sales were effected in multiple transactions, at varying prices, on July 6, 2006, as follows: 700 shares at \$19.56; 200 at \$19.57; 100 at \$19.58; 400 at \$19.60; 400 at \$19.61; 87 at \$19.62; 720 at \$19.63; 1.592 at \$19.64; 1.160 at \$19.65; 1.00 at \$19.66; 1.287 at \$19.67; 953 at \$19.68; 500 at \$19.69; 700 at \$19.77; 1.000 at \$19.77; 1.400 at \$19.75; 1.500 at \$19.74; 1.200 at \$19.75; 1.200 at \$19.77; 1.500 at \$19.60; 1.087 at \$19.65; 1.073 at \$19.77; 1.200 at \$19.77; 1.300 at \$19.77; 1.500 at \$19.80; 1.500 at \$19.81; 500 at \$19.82; 200 at \$19.83; 300 at \$19.82; 1.200 at \$19.25; 100 at \$19.95; 100 at \$19.99; 100 at \$19.99; 100 at \$20.02; 100 at \$20.03; and 100 at \$20.04. The weighted average sales price for these transactions was \$19.7316 per share (10) The sales were effected in multiple transactions, at varying prices, on July 7, 2006, as follows: 61 shares at \$19.16; 71 at \$19.21; 168 at \$19.22; 200 at \$19.23; 200 at \$19.24; 1.000 at \$19.25; 400 at \$19.26; 100 at \$19.27; 396 at \$19.26; 100 at \$19.26; 100 at \$19.34; 100 at \$19.34; 00 at \$19.35; 200 at \$19.56; 207 at \$19.56; 624 at \$19.45; 100 at \$19.94; 410 at \$19.44; 421 at \$19.44; 140 at \$19.45; 100 at \$19.45; 100 at \$19.45; 100 at \$19.45; 207 at \$19.55; 205 shares at \$19.56; 642 at \$19.57; 900 at \$19.59; 953 at \$19.59; 400 at \$19.74; 120 at \$19.75; 200 at \$19.56; 563 at \$19.66; 140 at \$19.66; 673 at \$19.66; 642 at \$19.57; 000 at \$19.71; 485 at \$19.72; 300 at \$19.74; 120 at \$19.75; 200 at \$19.76; and 41 at \$19.76; and 41 at \$19.76; and 41 at \$19.76; and 41 at \$19.76; 300 at \$19.71; 485 at \$19.72; 400 at \$19.74; 120 at \$19.75; 200 at \$19.76; and 41 at \$19.78. The weighted average sales price for these transactions was \$19.504 per share. . . . (11) The sales were effected in multiple transactions, at varying prices, on July 10, 2006, as follows:
- (12) The sales were effected in multiple transactions, at varying prices, on July 11, 2006, as follows: 16,800 shares at \$19.00; 600 at \$19.01; 1,400 at \$19.02; 500 at \$19.03; 600 at \$19.04; 300 at \$19.05; 200 at \$19.06; 300 at \$19.07; 100 at \$19.08; 200 at \$19.09; 703 at \$19.10; 200 at \$19.11; 100 at \$19.12; 200 at \$19.13; 100 at \$19.16; 100 at \$19.18; 1,000 at \$19.21; 197 at \$19.22; 100 at \$19.23; 100 at \$19.25; 800 at \$19.26; and 400 at \$19.27. The weighted average sales price for these transactions was \$19.0371 per share.
- (13) The sales were effected in multiple transactions, at varying prices, on July 12, 2006, as follows: 400 shares at \$19.14; 100 at \$19.15; 100 at \$19.16; 300 at \$19.17; 600 at \$19.18; 600 at \$19.19; 100 at \$19.20; 500 at \$19.21; 897 at \$19.22; 730 at \$19.23; 1,583 at \$19.24; 200 at \$19.25; 2,200 at \$19.26; 1,009 at \$19.27; 912 at \$19.28; 586 at \$19.29; 713 at \$19.30; 1,180 at \$19.31; 656 at \$19.32; 200 at \$19.33; 400 at \$19.34; 1,094 at \$19.35; 500 at \$19.36; 800 at \$19.37; 300 at \$19.38; 500 at \$19.39; 1,170 at \$19.40; 730 shares at \$19.41; 600 at \$19.42; 900 at \$19.43; 400 at \$19.44; 200 at \$19.45; 700 at \$19.46; 700 at \$19.45; 700 at \$19.46; 300 at \$19.47; 400 at \$19.49; 900 at \$19.43; 400 at \$19.51; 300 at \$19.51; 300 at \$19.51; 300 at \$19.51; 300 at \$19.51; 400 at \$19.56; 320 at \$19.57; 100 at \$19.58; 100 at \$19.61; and 500 at \$19.63. The weighted average sales price for these transactions was \$19.362 per share.
- (14) The sales were effected in multiple transactions, at varying prices, on July 13, 2006, as follows: 5,900 shares at \$19.00; 500 at \$19.01; 369 at \$19.02; 400 at \$19.03; 200 at \$19.04; 420 at \$19.05; 300 at \$19.06; 500 at \$19.07; 417 at \$19.08; 600 at \$19.09; 300 at \$19.11; 400 at \$19.12; 500 at \$19.13; 317 at \$19.14; 200 at \$19.15; 486 at \$19.16; 300 at \$19.17; 700 at

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\$19.20; 100 at \$19.22; 600 at \$19.23; 100 at \$19.24; 500 at \$19.25; 200 at \$19.26; 300 at \$19.27; 322 at \$19.28; 200 at \$19.29; 600 at \$19.30; 200 at \$19.31; 100 at \$19.32; 200 at \$19.33; 200 at \$19.34; 400 at \$19.36; and 200 at \$19.42. The weighted average sales price for these transactions was \$19.1121 per share.

- (15) The sales were effected in multiple transactions, at varying prices, on July 19, 2006, as follows: 11,300 shares at \$19.00; 2,600 at \$19.01; 600 at \$19.02; 500 at \$19.03; 600 at \$19.04; 200 at \$19.05; 200 at \$19.06; 200 at \$19.07; 100 at \$19.09; 100 at \$19.10; 100 at \$19.11; 400 at \$19.12; 500 at \$19.14; 200 at \$19.16; 400 at \$19.18; 1,000 at \$19.19; 526 at \$19.20; 100 at \$19.23; 200 at \$19.25; 200 at \$19.26; 834 at \$19.27; 1,000 at \$19.28; 200 at \$19.29; 100 at \$19.30; 300 at \$19.31; 200 at \$19.33; 300 at \$19.34; 200 at \$19.35; 118 at \$19.36; 200 at \$19.37; 657 at \$19.38; and 100 at \$19.39. The weighted average sales price for these transactions was \$19.0907 per share.
- (16) The sales were effected in multiple transactions, at varying prices, on July 20, 2006, as follows: 300 shares at \$19.00; 100 at \$19.01; 300 at \$19.02; 100 at \$19.03; 100 at \$19.07; 100 at \$19.07; 100 at \$19.07; 100 at \$19.08; 100 at \$19.13; 100 at \$19.14; 200 at \$19.16; 200 at \$19.17; 600 at \$19.18; 300 at \$19.20; 200 at \$19.22; 700 at \$19.25; 100 at \$19.26; 300 at \$19.28; and 100 at \$19.31. The weighted average sales price for these transactions was \$19.1656 per share.
- (17) The sales were effected in multiple transactions, at varying prices, on July 25, 2006, as follows: 2,600 shares at \$19.00; 1,100 at \$19.01; 200 at \$19.02; 600 at \$19.04; 300 at \$19.07; 200 at \$19.08; 300 at \$19.09; 200 at \$19.11; and 100 at \$19.13. The weighted average sales price for these transactions was \$19.0246 per share.
- (18) The sales were effected in multiple transactions, at varying prices, on July 27, 2006, as follows: 100 shares at \$19.68; 200 at \$19.79; 100 at \$19.95; 200 at \$20.22; 100 at \$20.23; 100 at \$20.24; 168 at \$20.26; 200 at \$20.36; 200 at \$20.47; 100 at \$20.49; 200 at \$20.05; 200 at \$20.06; 100 at \$20.64; 200 at \$20.69; 300 at \$20.7; 200 at \$20.7; 200 at \$20.79; 100 at \$20.80; 200 at \$20.80; 200 at \$20.91; 300 at \$20.92; 600 at \$20.93; 700 at \$20.99; 200 at \$20.95; 200 at \$20.95; 200 at \$20.95; 200 at \$20.90; 300 at \$20.97; 300 at \$20.99; 200 at \$21.00; 501 at \$21.21, 100 at \$21.22; 100 at \$21.23; 100 at \$21.23; 100 at \$21.21, 100 at \$21.23; 100 at \$21.21, 100 at \$21.23; 100 at \$21.22; 100 at \$21.21, 100 at \$21.23; 100 at \$21.22; 100 at \$21.23; 100 at \$21.21, 100 at \$21.23; 100 at \$21.21, 100 at \$21.23; 100 at \$21.27; 100 at \$21.27; 100 at \$21.21, 100 at \$21.35; 200 at \$21.36; 100 at \$21.48; 100 at \$21.52; 200 at \$21.67; 100 at \$21.92; 100 at \$21.73; 100 at \$21.73; 100 at \$21.23; 100 at \$21.74; 100 at \$21.77; 400 at \$21.78; 200 at \$22.15; 200 at \$22.163; 100 at \$21.80; 100 at \$21.21, 110 0t at \$22.21, 110 0t at \$22.22; 100 at \$21.92; 200 at \$21.92; 200 at \$21.92; 200 at \$21.91, 200 at \$22.17; 100 at \$21.23; 100 at \$22.23; 100 at \$22.42; 200 at \$22.24; 100 at \$22.24; 100 at \$22.25; 100 at \$22.23; 100 at \$22.24; 100 at \$22.24; 100 at \$22.25; 400 at \$22.25; 400 at \$22.25; 400 at \$22.55; 200 at \$22.57; 200 at \$22.57; 200 at \$22.65; 100 at \$22.65; 100 at \$22.66; 100 at \$22.57; 200 at \$22.65; 200 at \$22.65; 100 at \$22.26; 100 at \$22.52; 400 at \$22.52; 400 at \$22.57; 200 at
- (19) The sales were effected in multiple transactions, at varying prices, on July 28, 2006, as follows: 143 shares at \$20.84; 29 at \$20.85; 28 at \$20.86; 100 at \$20.96; 96 at \$20.97; 100 at \$20.98; 200 at \$20.99; 609 at \$21.00; 200 at \$21.01; 300 at \$21.02; 500 at \$21.05; 900 at \$21.06; 400 at \$21.07; 300 at \$21.08; 1,400 at \$21.09; 1,800 at \$21.10; 1,800 at \$21.11; 1,700 at \$21.22; 2,000 at \$21.31; 800 at \$21.14; 300 at \$21.15; 300 at \$21.16; 700 at \$21.17; 1,100 at \$21.18; 500 at \$21.19; 1,900 at \$21.20; 300 at \$21.21; 200 at \$21.22; 400 at \$21.23; 600 at \$21.24; 100 at \$21.25; 100 at \$21.28; 200 at \$21.29; 600 at \$21.31; 95 at \$21.32; 100 at \$21.33; 300 at \$21.34; 200 at \$21.37; 200 at \$21.38; 100 at \$21.40; 100 at \$21.42; 200 at \$21.45; 100 at \$21.91; 300 at \$21.92; 200 at \$22.02; 20

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JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the persons named below agrees to the joint filing of a Statement on Schedule 13D (including amendments thereto) with respect to the Common Stock, no par value, of MKS Instruments, Inc., a Massachusetts corporation, and further agrees that this Joint Filing Agreement be included as an exhibit to such filings provided that, as contemplated by Section 13d-1(k)(ii), no person shall be responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

In evidence thereof, the undersigned, being duly authorized, hereby execute this Agreement this July 31, 2006.

This Joint Filing Agreement may be executed in any number of counterparts, all of which together shall constitute one and the same instrument.

EMERSON ELECTRIC CO.

By: /s/ Timothy G. Westman

Name: Timothy G. Westman Title: Assistant Secretary

ASTEC AMERICA, INC.

By: /s/ Timothy G. Westman

Name: Timothy G. Westman Title: Secretary

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